



National Weather Service Support Columbia Tragedy

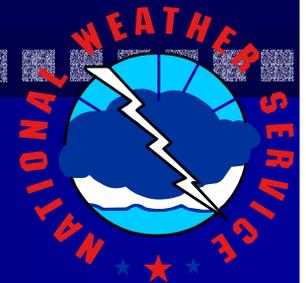
Bill Proenza
Regional Director
National Weather Service
Southern Region

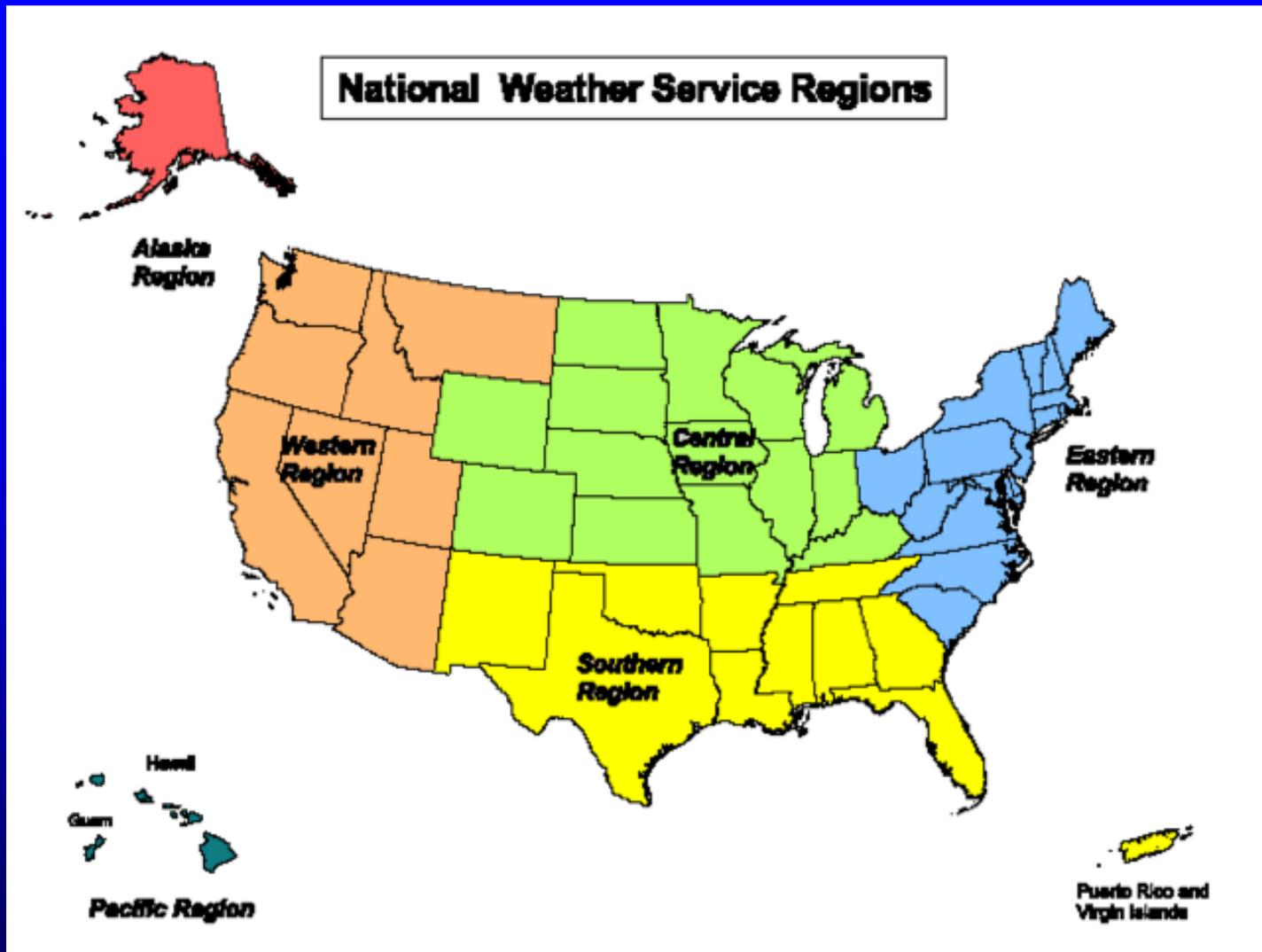
Overview

- NWS Field designed to provide you with local/site specific weather support
- Vital Performance during Columbia tragedy
- And what do we have to further support you



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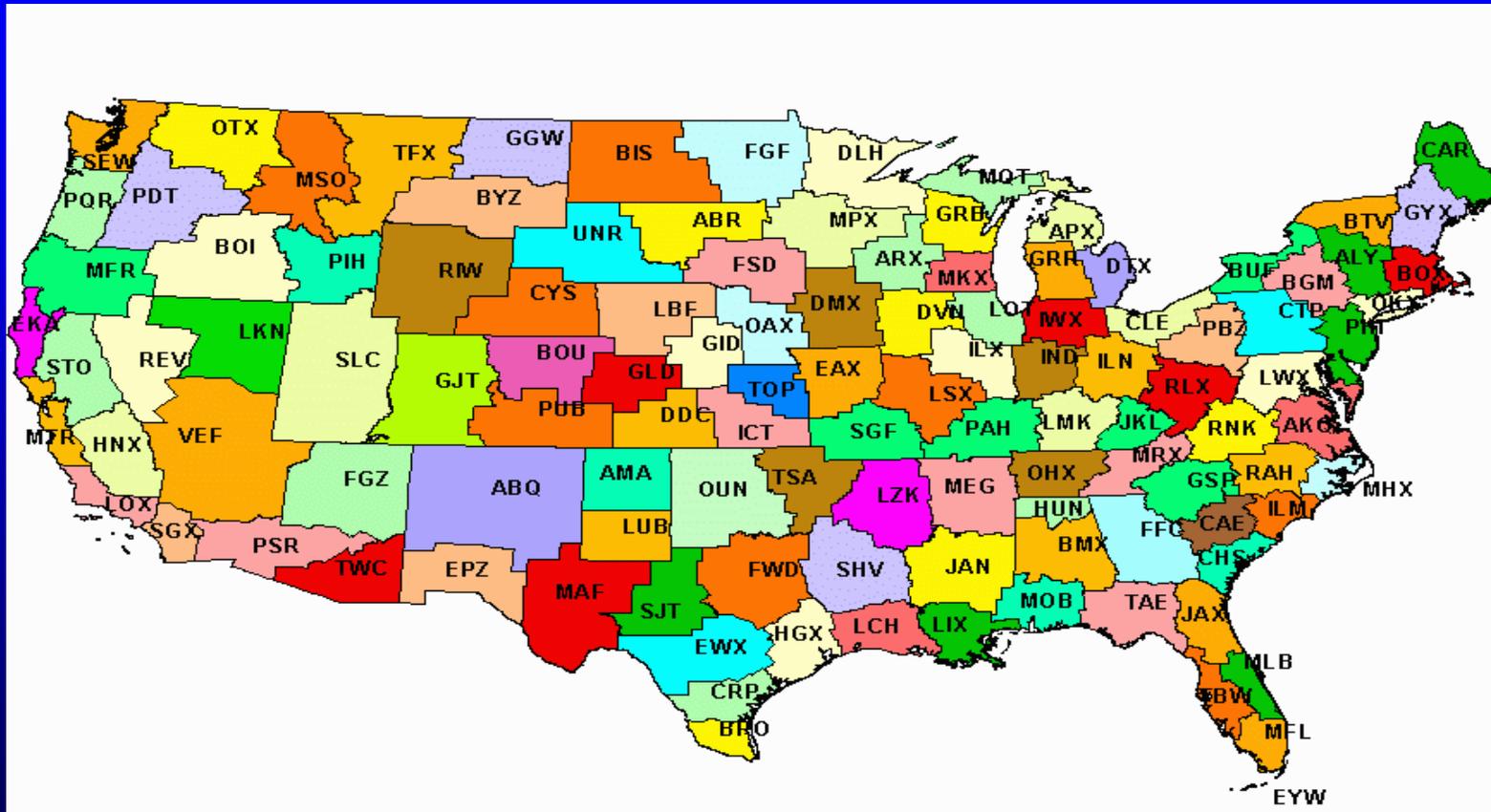




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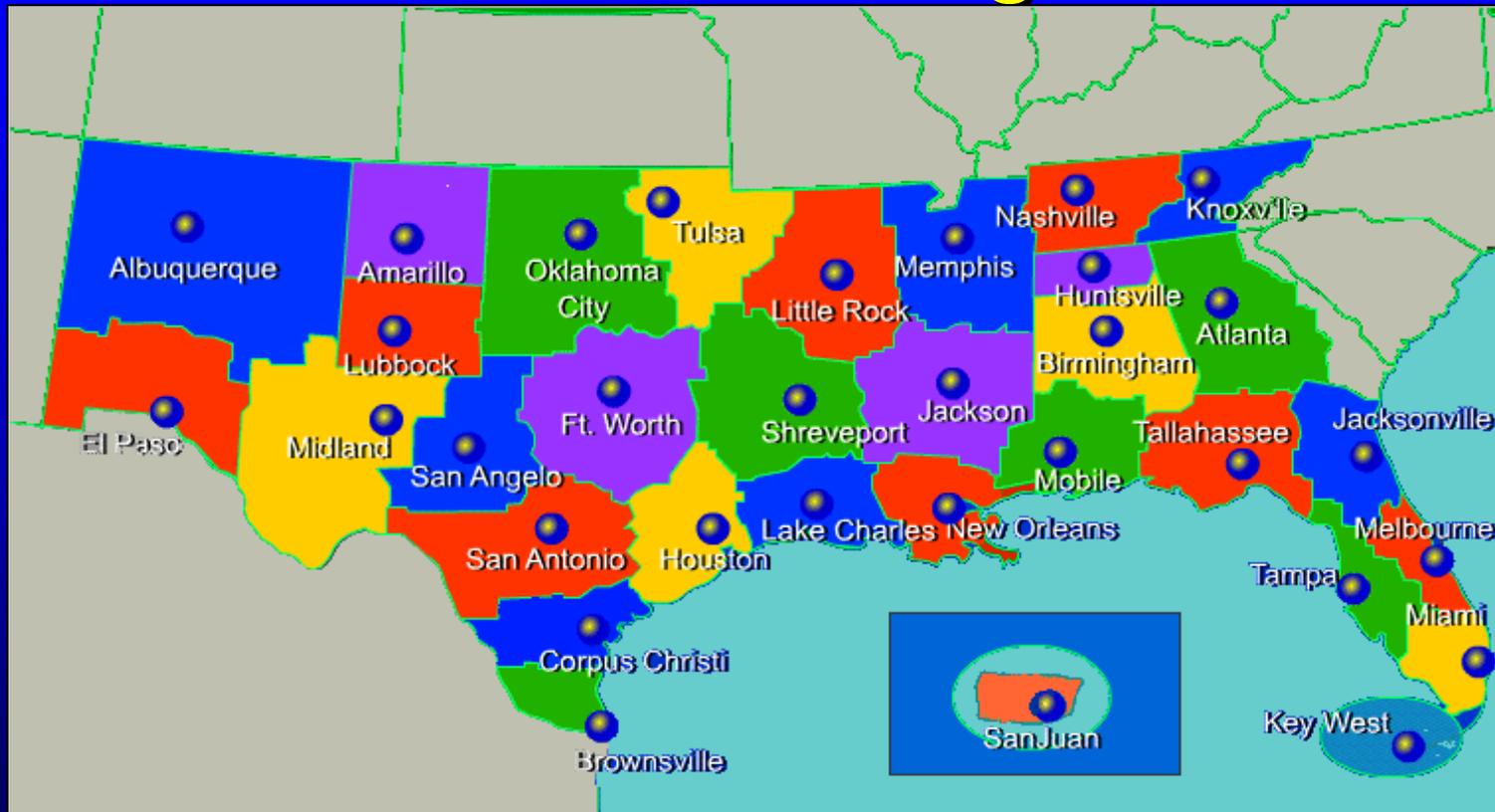
122 National Weather Service Forecast Offices Cover the USA



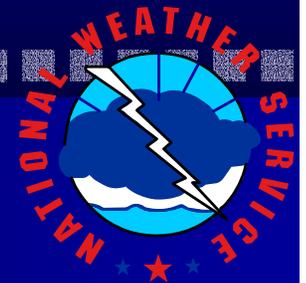
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32 NWS Forecast Offices in the Southern Region



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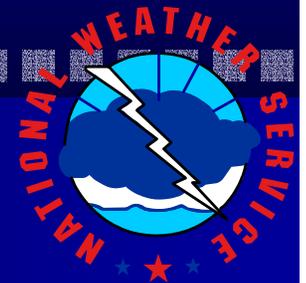
Benefits of Your Local WFO

Local Area Expertise For:

- More Accurate Forecasts and Warnings
- Outreach
 - Public awareness supports our mission delivery
- Greater Service to Public and Partners
- Better Climate Services
- Homeland Security – Provide mesoscale support during incidents



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Local WFO Operations

- Delivers the major part of the NWS mission
- Issue all weather warnings, watches and advisories for their local area
- 122 offices in U.S.A.
- Offices comprised of 20 to 25 staff members

The best weather expertise for your local area



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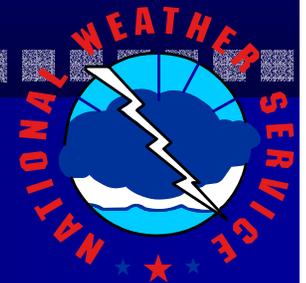


Spaceflight Meteorology Group

- **SHUTTLE MISSION WEATHER SUPPORT**
 - Precise, site-specific shuttle landing forecasts
 - Integral part of JSC Flight Control Team
- Supports Special Operations
- Johnson Space Center Forecasts
- Provides Weather Support to NASA Programs



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Regional Operations Center

- Shifts regional resources to events
- Conducts briefings with NWS offices, EM community and media
- Source for NWS media interviews in support of WFOs



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Support for Columbia Recovery

Principle Agencies

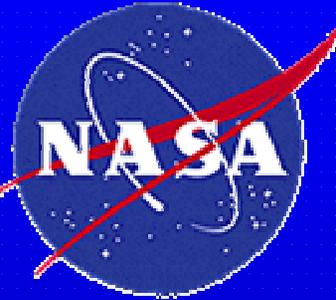


**Spaceflight
Meteorology
Group**

Regional Operations
Center

Weather Forecast
Offices

River Forecast
Centers

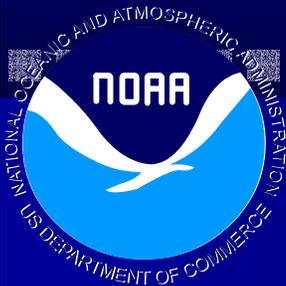


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NWS February 1 Operations

- WFOs began taking media interviews after debris trail was indicated on NWS Doppler radars
- SR-ROC became fully operational within 30 minutes of incident
- SR-ROC augmented staffing to provide information to federal, state and local partners and to provide interviews as needed
- SR-ROC served as a focal point for NWS weather data collection



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NWS February 1 Operations

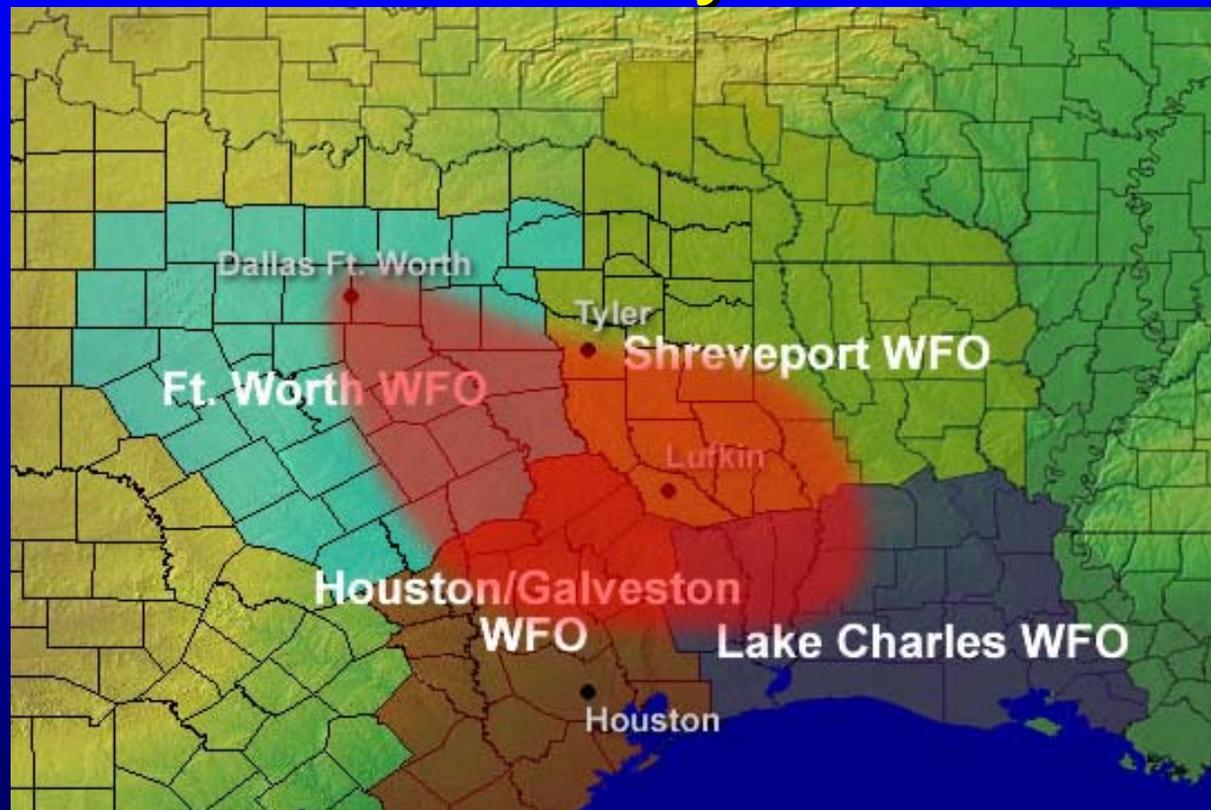
- WFOs issued Civil Emergency Messages at the request of FEMA and Texas DEM to warn public of danger of handling debris
- Within 3 hours of accident, SRH personnel provided downloadable radar imagery on the NWS SR web site
 - Imagery used by major media outlets such as CBS, USAToday, and the New York Times
- Over the next 3 days, NWS radar imagery would receive **44 Million** hits on the SR server



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Weather Forecast Offices In Recovery Area



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Recovery Weather Support

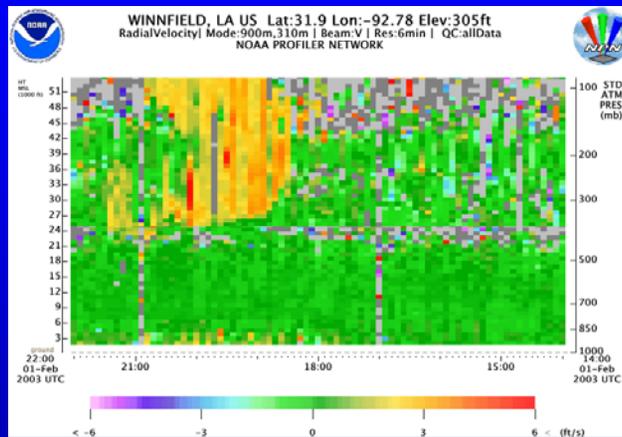
- **Weather Briefing -- Recovery Area**
 - Precise weather updates
 - Kept agencies informed of forecast weather
- **Maintained Weather Watch on Remainder of the State**
 - Kept federal, state and local agencies informed of weather dangers outside of recovery area
- **Supplied staffing for on-site support**



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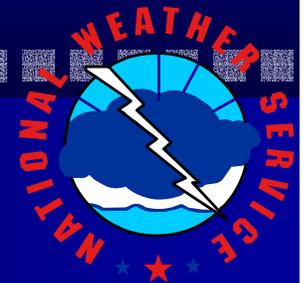
Recovery Weather Support



- Incident Meteorologists from NWS WFOs were sent to the Columbia Recovery Office to assist efforts
- Regional Operations Center provided daily briefings to recovery personnel in Federal, State and Local agencies



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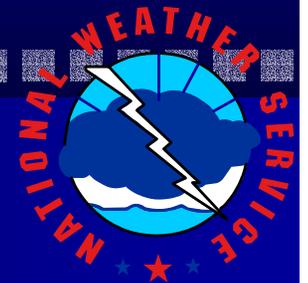


Federal Agencies Supported

- Federal Emergency Management Agency (FEMA)
- National Aeronautics and Space Administration (NASA)
- Department of Defense (DOD)
- Federal Bureau of Investigation (FBI)
- Bureau of Alcohol, Tobacco, and Firearms (BATF)
- National Transportation Safety Board (NTSB)
- Environmental Protection Agency (EPA)
- US Navy (Navy)
- US Coast Guard (USCG)
- US Forest Service (USFS)
- US Air Force (USAF)
- National Park Service (NPS)
- US Fish and Wildlife Service (USFWS)
- US Attorney General (USAG)
- US Public Health Service
- Department of Transportation (DOT)



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State/local Agencies Supported

- Texas Department of Public Safety (DPS)
- Texas Army National Guard (TXARNG)
- Texas Forest Service (TFS)
- Office of the Attorney General (TXOAG)
- Texas Parks and Wildlife Department (TPWD)
- Texas Department of Health (TDH)
- Mental Health and Mental Retardation (MHMR)
- Civil Air Patrol (CAP)
- The University of Texas at Austin (UT)
- Stephen F. Austin State University (SFASU)
- Sabine River Authority (SRA)
- Air Land Emergency Resource Team (ALERT)
- Local fire, law enforcement, EMS, and search and rescue units



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Lessons Reinforced by Columbia

- NWS can further build on the partnerships with the EM community
- Ability of the NWS to carry out its mission depends on the vital work of the local Weather Forecast Offices
- SR-ROC is a valuable tool for our regional and national partners to get weather information from different WFO areas



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The Future of the NWS

“Forecast improvement will be through mesoscale (*local scale*) decision making.”

- With use of local models and expertise, we will be able to meet increasing public and private partner needs for accuracy
- Warning Decision Support System 2 (3-5 Yrs)
- Phased Array Radar (longer term)



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NWS SR Internet Site

www.srh.weather.gov

- Serves as a one-stop source of weather information.
- Developed with the both - partners and general users - in mind
 - Easy navigation
 - Data given in the manner *you* need it.
- Increases public visibility of NWS mission and services



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NWS SR Internet Site

- Forecasts obtained by either postal zip code, city/state search, or by point and click maps
- Weather Information in clear, concise format
- Emphasizes local weather expertise



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NWS Internet Forecasts

Quick Forecast Information

Current Weather Conditions

Latest Weather Advisories

Quick Forecast Text

Radar and Satellite

The screenshot shows the National Weather Service website for Heidenheimer, TX. The page includes a search bar, a 7-day forecast table, a hazardous weather outlook, current conditions, and radar/satellite images. The 7-day forecast table is as follows:

TODAY	TONIGHT	TUESDAY	TUESDAY NIGHT	WEDNESDAY	WEDNESDAY NIGHT	THURSDAY	FRIDAY	SATURDAY
Partly Cloudy	Mostly Cloudy	T-storms Possible	T-storms Possible	Chance T-storms				
Hi 78°F	Lo 55°F	Hi 82°F	Lo 65°F	Hi 85°F	Lo 68°F	Hi 85°F	Hi 85°F	Hi 82°F

The hazardous weather outlook section is highlighted in green and contains the following text:

Hazardous Weather Outlook
Today, Partly cloudy. Highs in the upper 70s. East winds 5 to 10 mph.
Tonight, Partly cloudy. Lows in the mid 50s. Southeast winds 5 to 10 mph.
Tuesday, Partly cloudy. Highs in the lower 80s. Southeast winds 10 to 20 mph.
Tuesday night, Partly cloudy. Lows in the mid 60s.
Wednesday, Partly cloudy. Highs in the mid 80s.
Wednesday night, Mostly cloudy. Lows in the mid 60s.
Thursday, Partly cloudy with a slight chance of showers and thunderstorms. Highs in the mid 80s.
Friday, Partly cloudy with a slight chance of showers and thunderstorms. Lows in the upper 60s and highs in the mid 80s.
Saturday, Mostly cloudy with a chance of showers and thunderstorms. Lows in the upper 60s and highs in the lower 80s.
Sunday, Partly cloudy. A slight chance of showers and

The current conditions section is highlighted in pink and contains the following text:

Fort Hood / Gray U. S. Army Airfield
Last Update on May 20, 9:55 am CDT
Partly Cloudy
68°F (20°C)
Humidity: 37 %
Wind Speed: SE 9 MPH
Barometer: 30.26 (1024.1 mb)
Dewpoint: 41°F (5°C)
Heat Index: 77°F (25°C)
More Local Wx: 2 Day History

The radar and satellite images section is highlighted in orange and contains two images: a radar image and a satellite image.

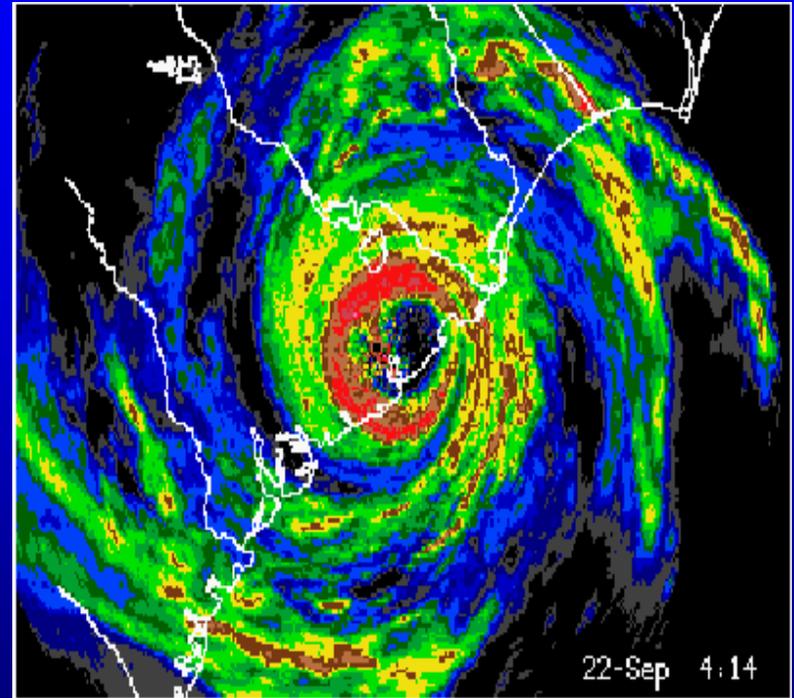


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Radar Images

- Available as a time loop for all Weather Service Radars in the U.S.
- Provides real time storm development, movement, and precipitation information



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NWS Digital Forecasts

- Forecasting for the 21st Century
- Weather Information on a 1.6 mile grid
 - (GIS)
- Forecast out to 7 days
- Maximizes Local Expertise



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Turn Around Don't Drown™

- Flood and Flash Flood Safety Campaign
- Over 30 partners representing local, regional, and national organizations
- Launched in May 2003 by NWS Southern Region for the Nation



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Click on this logo



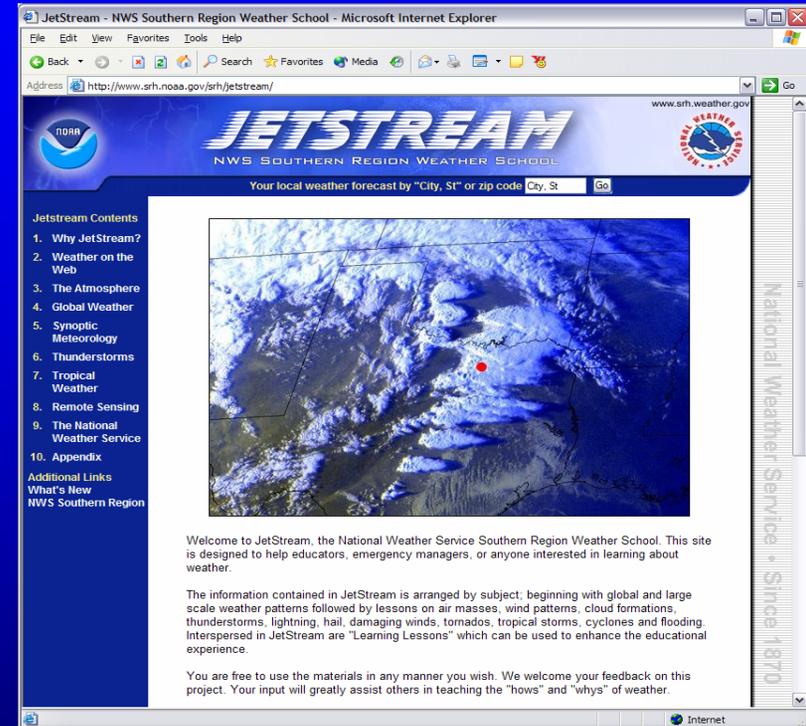
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Project Jetstream

- Designed to help anyone interested in learning about weather
- Touches on different areas of weather, from thunderstorms to tropical weather

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Click on the Jetstream logo



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National Weather Service

**“...government closest to the people,
governs best.”**

- President George W. Bush

Applied to the NWS:

**Government closest to the people,
serves best**



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Questions?

Bill.Proenza@noaa.gov

(817) 978-1000

Would you like copies of these slides?

www.srh.weather.gov

At Left Margin Click on:

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Welcome from the Director

**“Columbia Recovery
Operations”**



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